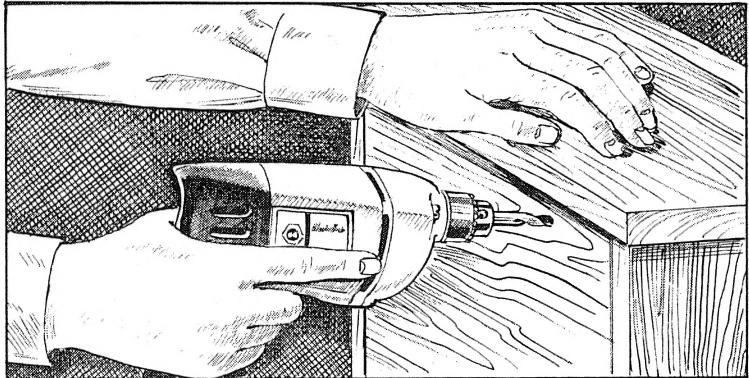




Black & Decker

OWNER'S MANUAL

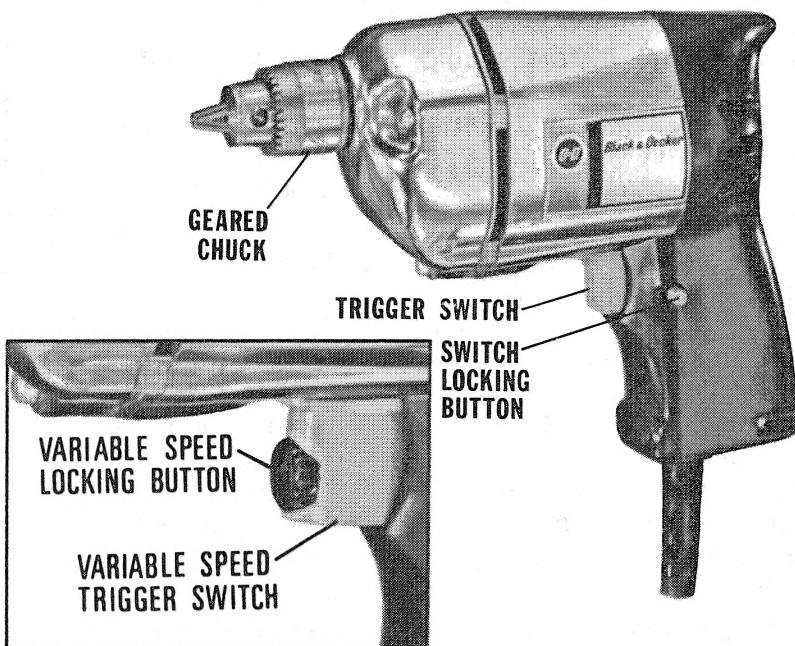


Your new Black & Decker Drill is an outstanding value, combining quality construction, excellent performance and versatility with low price. It is a very good choice for light duty work and occasional building or remodeling projects.

Not only will it DRILL holes in practically any material, but with optional accessories it can SAND, POLISH, BUFF, DRIVE SCREWS, GRIND, DRIVE HOLE SAWS, MIX PAINT, PUMP WATER and REMOVE rust and old paint.

For personal safety and for proper operation of the Drill, please take the time to carefully read all of the safety rules and instructions in this booklet. Don't forget to send in the guarantee registration card.

THANK YOU for buying
BLACK & DECKER!



#7020 & #7120 DRILLS

1/4" & 3/8" DRILLS

Cat. No.	Capacity		Volts AC	Amps	HP	Switch	R.P.M.
	Steel	Hardwood					
7010	1/4"	1/2"	120	2.3	1/6	Single Speed	2250
7011	1/4"	1/2"	120	2.3	1/6	2-Speed	1600 or 2250
7020	1/4"	1/2"	120	2.3	1/6	Variable Speed	0 to 2250
7110	3/8"	3/4"	120	2.5	1/6	Single Speed	1000
7120	3/8"	3/4"	120	2.5	1/6	Variable Speed	0 to 1000

IMPORTANT INFORMATION



Safety Rules for Power Tools

The use of the Safety Seal of the Power Tool Institute assures you that this tool is produced and tested in accordance with applicable national safety standards. Operational safety, however, depends to a great extent upon the user of the tool. Please pay close attention to the following rules.

1. **KNOW YOUR POWER TOOL** — Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
2. **GROUND ALL TOOLS — UNLESS DOUBLE-INSULATED.** If tool is equipped with three-prong plug, it should be plugged into a three-hole electrical receptacle. If adapter is used to accommodate two-prong receptacle, the adapter wire must be attached to a known ground. Never remove third prong.
3. **KEEP GUARDS IN PLACE** and in working order.
4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
5. **AVOID DANGEROUS ENVIRONMENT.** Don't use power tool in damp or wet locations. And keep work area well lit.
6. **KEEP CHILDREN AWAY.** All visitors should be kept safe distance from work area.
7. **STORE IDLE TOOLS.** When not in use, tools should be stored in dry, high or locked-up place — out of reach of children.
8. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
9. **USE RIGHT TOOL.** Don't force small tool or attachment to do the job of a heavy duty tool.
10. **WEAR PROPER APPAREL.** No loose clothing or jewelry to get caught in moving parts. Rubber gloves and footwear are recommended when working outdoors.
11. **USE SAFETY GLASSES** with most tools. Also face or dust mask if cutting operation is dusty.
12. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil and sharp edges.
13. **SECURE WORK.** Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
14. **DON'T OVERREACH.** Keep proper footing and balance at all times.
15. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp at all times, and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
16. **DISCONNECT TOOLS.** When not in use, before servicing; when changing accessories such as blades, bits, cutters, etc.
17. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
18. **AVOID ACCIDENTAL STARTING.** Don't carry plugged-in tool with finger on switch.

Extension Cord

When using this drill at a considerable distance from power source, a 3-conductor, grounding-type extension cord of adequate size must be used for safety, and to prevent loss of power and over-heating. For a 120-volt tool, the minimum size of the wires in any extension cord up to 75 feet long must be 18-gauge (American Wire Gauge). If the total extension cord length is from 75 to 100 feet, 16-gauge wire is required throughout the extension. 200-volt tools require a minimum wire size of only 18-gauge in extension cord lengths up to 200 feet long. (NOTE: 16-gauge wire is heavier than 18-gauge wire and will carry current for longer distances without a voltage drop.)

P.T.I. Safety Rule #12 applies to Extension Cords as well as the Tool Power Cord. Before using cords, inspect them for loose or exposed wires and damaged insulation. Make any needed repairs or replacement before using your power tool.

MAINTENANCE

If The Tool Does Not Run

First, check your electric outlet by plugging in another tool or lamp. If either of these doesn't work, check for blown fuses. If current is present, check plugs and sockets for tight connections. If the tool still won't run, take or send it to a Black & Decker Service Center for checking and repair. Do not attempt any major repair on your own.

Lubrication

Self lubricating bearings are used in the tool and periodic relubrication is not required. However, it is recommended that, at least once a year, you take or send the tool to a B&D Service Center for a thorough cleaning, inspection and lubrication of the gear case.

Guarantee

Black & Decker guarantees, for one year from date of purchase, to correct by repair or parts replacement without charge any defect due to faulty material or workmanship. Simply return the complete unit, transportation prepaid, to any Black & Decker Service Center or Authorized Service Station. Naturally, we assume no responsibility for damage caused by misuse, careless handling or where repairs have been made or attempted by others. No other guarantee, written or verbal, is authorized by us.

Important!

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment should be performed by BLACK & DECKER Service Centers or other qualified service organizations, always using Black & Decker replacement parts.



**THE BLACK & DECKER MFG. CO.
Towson, Md. 21204, U.S.A.**

OPERATION

Switches

SINGLE SPEED (1/4" & 3/8" Drills Nos. 7010, 7110)

To start Drill, depress trigger switch; to stop Drill, release trigger. To lock trigger in "ON" position for continuous operation, or when using Drill in a Vertical or Horizontal Stand, depress trigger and push in locking button (located behind the trigger), then gently release trigger. To release locking mechanism, depress trigger fully, then release it.

2-SPEED SWITCH (1/4" Drill No. 7011)

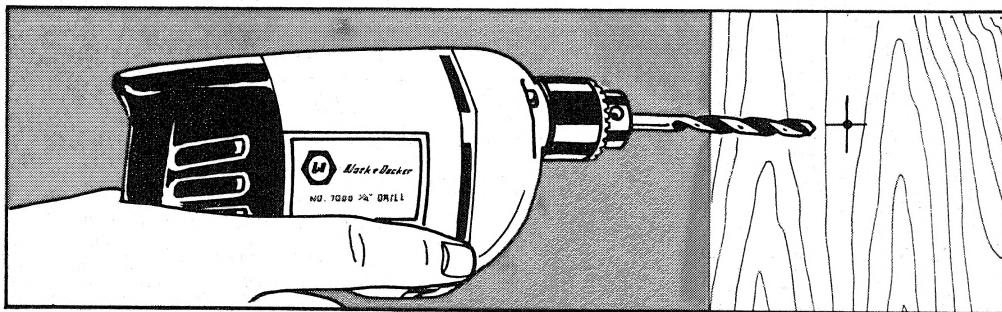
Operation is the same as above except that when the trigger is depressed past the halfway point in its travel, the motor speed changes from low to high. This change is audible. Use low speed for drilling in METAL, PLASTICS OR CERAMICS. High speed is better for drilling WOOD and for using ABRASIVE and POLISHING ACCESSORIES.

VARIABLE SPEED (1/4" & 3/8" Drills Nos. 7020, 7120)

(a) For normal operations, rotate the Variable Speed Locking Button clockwise until it stops. This permits "FREE HAND" speed control — the farther the trigger is depressed, the higher the R.P.M. (b) To set the trigger switch to produce a selected speed each time it is squeezed, first rotate the Variable Speed Locking Button clockwise until it stops. Fully depress trigger, and with the Drill running at highest R.P.M., press in the Switch Locking Button. Release trigger and the tool will stay "ON." Now, rotate the Variable Speed Locking Button counterclockwise and you will notice a decrease in R.P.M. Continue rotating Button until desired speed is obtained. To turn Drill "OFF," squeeze trigger and release. At this setting, the Drill will run at selected speed each time the trigger is pulled; and, the trigger may be locked "ON" at the selected speed with the Switch Locking Button. Also, if the trigger is gradually depressed, speed will first be slow and then increase up to selected speed. (c) Use lower speeds for STARTING HOLES WITHOUT A CENTER PUNCH, DRILLING IN METAL OR PLASTICS, DRIVING SCREWS, DRILLING CERAMICS. Higher speeds are better for DRILLING WOOD AND COMPOSITION BOARDS, AND FOR USING ABRASIVE AND POLISHING ACCESSORIES.

CAUTION — ALL SWITCHES:

Be sure to release the switch locking button before disconnecting the plug from the power supply. Failure to do so will cause the tool to start immediately the next time it is plugged in. Damage or injury could occur.



Drilling

1. Always unplug the Drill when attaching or changing bits or accessories.
2. Use sharp drill bits only. For WOOD, use twist drill bits, spade bits, power auger bits, or hole saws. For METAL, use high-speed steel twist drill bits or hole saws. For MASONRY, such as brick, cement, cinder block, etc., use carbide-tipped bits.
3. Be sure the material to be drilled is anchored or clamped firmly. If drilling thin material, use a wood "back-up" block to prevent damage to the material.
4. Center-punch an indentation at the point to be drilled. This will overcome the tendency of the bit to slip around on a smooth surface. Place the tip of the bit in the indentation and turn motor "ON".
5. Always apply pressure in a straight line with the bit. Use enough pressure to keep drill biting, but do not push hard enough to stall the motor or deflect the bit.
6. Be sure to brace yourself against the twisting action of the drill.
7. IF DRILL STALLS, it is usually because it is being overloaded or improperly used. RELEASE TRIGGER IMMEDIATELY, remove drill bit from work, and determine cause of stalling. DO NOT CLICK TRIGGER OFF AND ON IN AN ATTEMPT TO START A STALLED DRILL — THIS CAN DAMAGE THE DRILL.
8. To minimize stalling on breaking through the material, reduce pressure on drill and ease the bit through the last fractional part of the hole.
9. Keep the motor running when pulling the bit back out of a drilled hole. This will help prevent jamming.

OPERATION

Care in Drilling

Twist drills are brittle and will break if enough bending stress is applied. To avoid stress on the drill bit, try extending your index finger along the side of the drill-housing with your middle finger on the trigger. Remember — guide the tool, don't force it! Should the tool become overheated, run it free of any load. The drill will cool faster by running it without load.

Drilling in Metal

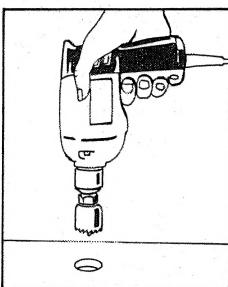
Use a cutting lubricant when drilling metals. The exceptions are cast iron and brass which should be drilled dry. The cutting lubricants that work best are sulphurized cutting oil or lard oil; bacon grease will also serve the purpose. Aluminum is best drilled with turpentine or kerosene.

Drilling in Wood

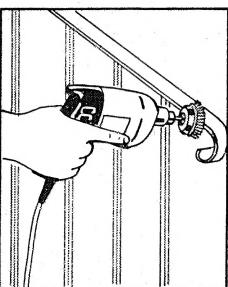
Holes in wood can be made with the same twist drills used for metal. These bits may overheat unless pulled out frequently to clear chips from the flutes. For larger holes, use Power Drill Wood Bits with a shank size that will fit your drill's chuck. Work that is apt to splinter should be backed up with a block of wood. Let up on the pressure just before the tip cuts through, this will give a good clean hole. Always leave the drill running when pulling it back out of a drilled hole, this prevents jamming.

Accessories

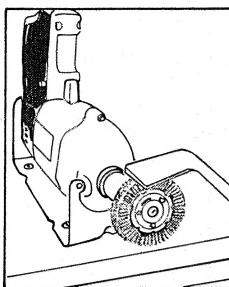
To multiply the usefulness of your Drill, a wide variety of accessories are available from your regular Black & Decker dealer. Some of these accessories are listed below. We strongly recommend that your first purchase be the No. U-2106 Safety Glasses which should be worn when using all drill accessories.



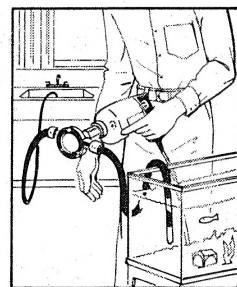
HOLE SAWS cut $\frac{5}{8}$ ", $\frac{3}{4}$ ", $\frac{7}{8}$ ", 1" or $1\frac{1}{8}$ " diam. holes in wood up to $\frac{3}{4}$ " thick.



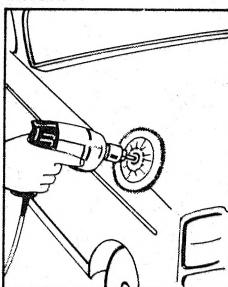
WIRE CUP BRUSH removes rust, scale, and old paint from metal surfaces.



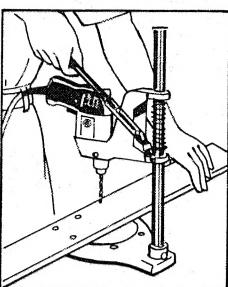
WIRE WHEEL BRUSHES clean and burnish metal, remove rust and paint.



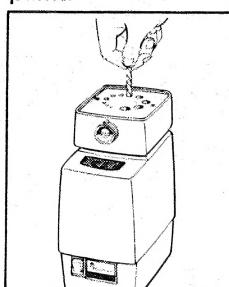
DRILL PUMP uses 2 pcs. of garden hose. Non-flammable liquids only.



POLISHING BONNETS. For cleaning, polishing, waxing of cars, floors, etc.



BENCH DRILL STAND permits steady, vertical drilling for accurate work.



DRILL BIT SHARPENER enables you to extend the useful life of your drill bits.



PAINT MIXER. Thoroughly mixes paint in up to 1-gal. cans. Fast, easy.

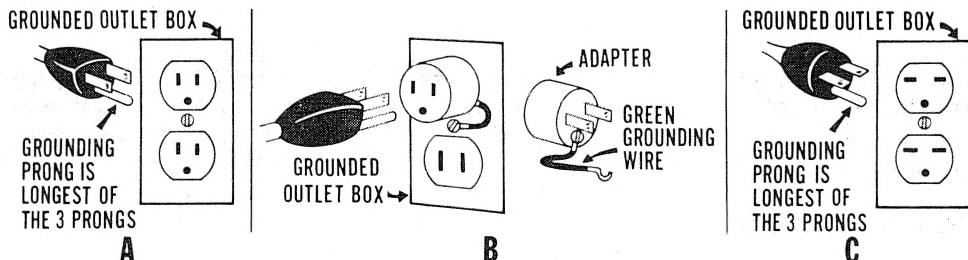


SAFETY GLASSES (No. U2106). Lightweight, clear plastic with side shields. Wear alone or over regular glasses.

IMPORTANT INFORMATION

Grounding

Your Drill has a grounding system to protect you from electric shock if some damage should occur to the wiring of the tool. This system utilizes the Drill's approved 3-conductor power cord and 3-prong grounding type attachment plug, which should be used with the proper grounding type receptacle, in accordance with the National Electric Code, Canadian Electrical Code, and Underwriters' Laboratories specifications.



If your unit requires less than 150 volts it has a plug that looks like Fig. "A". It will fit directly into the proper type of 3-wire grounding receptacle. The unit is then grounded automatically each time it is plugged in.

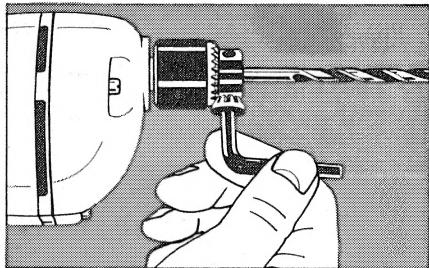
Shown in Fig. "B" is a special grounding adapter (not allowed in Canada by the Canadian Electrical Code) which is available from your dealer and will permit using a 2-wire receptacle. The green grounding wire extending from the side of the adapter must be connected to a Permanent Ground.

If the unit requires from 150 to 250 volts, it has a plug like Fig. "C". No adapter is available and the plug must be used in the proper 3-wire grounding receptacle.

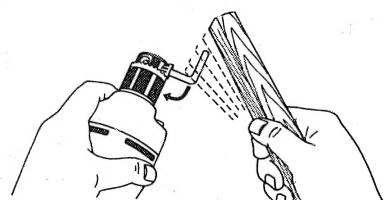
We recommend that you NEVER disassemble the tool or try to do any rewiring in the electrical system. Any such repairs should be performed only by B&D Service Centers or other qualified service organizations. Should you be determined to make a repair yourself, remember that the green colored wire is the "grounding" wire. Never connect this green wire to a "live" terminal. If you replace the plug on the power cord, be sure to connect the green wire only to the grounding (longest) prong on a 3-prong plug.

If you use an extension cord, be sure that it is a 3-conductor, grounding type cord. Grounding must be continuous from the tool plug to the grounded receptacle.

Chuck



Turn collar to open chuck jaws. Place bit in chuck so that end rests on chuck bottom. Tighten chuck collar by hand. Place chuck key in each of the three holes, and tighten in clockwise direction. It's important to tighten chuck with all three holes. To release bit, turn chuck key counterclockwise in just one hole, then loosen chuck by hand.



To remove the chuck from the Drill, for using a threaded shank accessory or for chuck replacement, first unplug the tool. Insert the key in the chuck and tap it sharply in the direction the tool normally rotates — see at left. This will loosen the chuck shank threads and the chuck may be unscrewed by hand.